

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,258	06/26/2006	Makoto Nakajima	292742US26PCT	5655
22850 ORLON SPIV	7590 01/25/2008 AK, MCCLELLAND N	EXAMINER		
1940 DUKE S	TREET	FUQUA, SHA	FUQUA, SHAWNTINA T	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			3742	
	•			
			NOTIFICATION DATE	DELIVERY MODE
	• •		01/25/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

1) ⊠ Responsive to communication(s) filed on 26 June 2006. 2a) ☐ This action is FINAL. 2b) ⊠ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s)			S
## Examiner ## Art Unit ## Shawnthan Enqua ## Shawnthan Enq		Application No.	Applicant(s)
Shawntina Fuqua 3742		10/584,258	NAKAJIMA ET AL.
Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provision of 37 GFt 11-18(i). In no event, nower, may a repty be timely filed after 50 kt, 69 MONTHS from the mailing date of this communication of 37 GFt 11-18(i). In no event, nower, may a repty be timely filed after 50 kt, 69 MONTHS from the mailing date of this communication of 37 GFt 11-18(i). In no event, nower, may a repty be timely filed after 50 kt, 69 MONTHS from the mailing date of this communication. Failure to repty within the set or reactioned period for reject with 19 yet abuse, cause the application for Security of the communication, even if timely filed, may reduce any enterogenet turn adjustment. See 37 CFR 1.74(ii). Status 1) Responsive to communication(s) filed on 26 June 2006. 2a) This action is FINAL 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 26 June 2006 is/are: a) accepted or b) objected to by the Examiner. Application Papers 9) The path or equal that are objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 11) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 1	Office Action Summary	Examiner	Art Unit
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.130(a). In no event, however, may a resty be timely filed the second of the many be available under the provisions of 37 CFR 1.130(a). In no event, however, may a resty be timely filed the second of the control of t		Shawntina Fuqua	3742
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE @ MONTH(S) OR THIRTY (30) DAYS, WHIGHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extreasons for many te available under the provisions of 37 CFR 11360, in no event, however, may a reply be simely filled. If NO gend do reply is a pecified above, the maximum stankery period will apply and will expire SIX (9) MONTHS from the mailing date of this communication. If NO gend do reply is a pecified above, the maximum stankery period will apply and will expire SIX (9) MONTHS from the mailing date of this communication. Failure to reply will be stated readered period for reply in specified above, the maximum stankery period will apply and will expire SIX (9) MONTHS from the mailing date of this communication. Failure to reply will be stated readered period for reply in specified above, the maximum stankery period will apply and will expire SIX (9) MONTHS from the mailing date of this communication. Failure to reply will be stated replaced by the state of the communication will be replaced by the state of the communication of the maximum stankers and the mailing date of this communication. Failure to replace the maximum stankers are stated to the state of the communication. Failure to replace the mailing date of this communication. Failure to replace the maximum stankers are stated to the state of the communication. Failure to replace the maximum stankers are stated to the maximum stankers. Failure 2006. Claim Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4) Claim(s) 1-20 is/are pending in the application. 4) Claim(s) 1-20 is/are allowed. 6) Claim(s) 1-20 is/are allowed. 6) Claim(s) 1-20 is/are allowed. 6) Claim(s) 1-20 is/are allowed. 7) Claim(s) 1-21 is/are rejected. 8) The available of the state of the communi		appears on the cover sheet w	rith the correspondence address
1) ⊠ Responsive to communication(s) filed on 26 June 2006. 2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 1-and 12 is/are allowed. 6) ☑ Claim(s) 1-and 12 is/are rejected. 7) ☑ Claim(s) 2-11 and 13-20 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 26 June 2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * o) ☐ None of. 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☑ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 2. ☐ Certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *Notice of References Cited (PTO-892) ☐ Notice of Informal Palent Application	A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the m	G DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a n. eriod will apply and will expire SIX (6) MO tatute, cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 1-20 is/are allowed. 6) Claim(s) 1-31 2 is/are rejected. 7) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) 2-11 and 13-20 is/are objected to. 10) The specification is objected to by the Examiner. 10) The drawing(s) filed on 26 June 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	Status		·
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 1-20 is/are allowed. 6) Claim(s) 1-31 2 is/are rejected. 7) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) 2-11 and 13-20 is/are objected to. 10) The specification is objected to by the Examiner. 10) The drawing(s) filed on 26 June 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	1) Responsive to communication(s) filed on 2	?6 June 2006.	
3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 26 June 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	·— ·		
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1 and 12 is/are rejected. 7) Claim(s) 2-11 and 13-20 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 26 June 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	,—		ters, prosecution as to the merits is
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 and 12 is/are rejected. 7) ☐ Claim(s) 2-11 and 13-20 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 26 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Littachment(s)** Paper No(s)/Mail Date Paper No(s)/Mail Date Paper No(s)/Mail Date Paper No(s)/Mail Date **Dolice of Informal Patent Application	•		
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) ☒ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 26 June 2006 is/are: a) ☒ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Littachment(s)** Paper No(s)/Mail Date	Disposition of Claims		
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) ☒ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 26 June 2006 is/are: a) ☒ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Littachment(s)** Paper No(s)/Mail Date	4)⊠ Claim(s) 1-20 is/are pending in the applica	tion.	
5 ☐ Claim(s) is/are allowed. 6 ☐ Claim(s) is/are rejected. 7 ☐ Claim(s) are subject to restriction and/or election requirement. 8 ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9 ☐ The specification is objected to by the Examiner. 10 ☐ The drawing(s) filed on 26 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11 ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12 ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	, , , , , , , , , , , , , , , , , , , ,		
7) ☐ Claim(s) 2-11 and 13-20 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 26 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	5) Claim(s) is/are allowed.		
S Claim(s) are subject to restriction and/or election requirement. Application Papers	6)⊠ Claim(s) <u>1 and 12</u> is/are rejected.	,	
Application Papers	7)⊠ Claim(s) <u>2-11 and 13-20</u> is/are objected to		
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 26 June 2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	8) Claim(s) are subject to restriction ar	nd/or election requirement.	
10) ☐ The drawing(s) filed on 26 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Motice of References Cited (PTO-892)	Application Papers		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Notice of References Cited (PTO-892)	9) The specification is objected to by the Exam	miner.	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Notice of References Cited (PTO-892)	•		ected to by the Examiner.
Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☑ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Attachment(s) D ☑ Notice of References Cited (PTO-892) D ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) D ☐ Notice of Informal Patent Application			
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Attachment(s) Notice of References Cited (PTO-892)	Replacement drawing sheet(s) including the co	rrection is required if the drawing	g(s) is objected to. See 37 CFR 1.121(d).
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1.			
a) \[All \] b) \[Some * c) \[None of: 1. \[Certified copies of the priority documents have been received. 2. \[Certified copies of the priority documents have been received in Application No. \[3. \] Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Itachment(s) Notice of References Cited (PTO-892)	Priority under 35 U.S.C. § 119		
1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Ittachment(s) Motice of References Cited (PTO-892)		eign priority under 35 U.S.C.	§ 119(a)-(d) or (f).
2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Attachment(s) Notice of References Cited (PTO-892)	•— •	nents have been received.	
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. ** ** ** ** ** ** ** ** **			Application No
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. ** ** ** ** ** ** ** ** **	•		
Attachment(s) Notice of References Cited (PTO-892)			
Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Information Disclosure Statement(s) (PTO/SB/08) Notice of Informal Patent Application	* See the attached detailed Office action for a	list of the certified copies no	t received.
Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Information Disclosure Statement(s) (PTO/SB/08) Notice of Informal Patent Application			
Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Information Disclosure Statement(s) (PTO/SB/08) Notice of Informal Patent Application			
Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Informal Patent Application	Attachment(s)	من المعادلة	Summany (PTO 412)
) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application		·	
Paper No(s)/Mail Date <u>6/26/06</u> . 6) Other:	3) Information Disclosure Statement(s) (PTO/SB/08)	´ 5) ☐ Notice of	Informal Patent Application
	Paper No(s)/Mail Date <u>6/26/06</u> .	6) [_] Other:	

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato (US6403927).

Kato discloses a vertical heat processing apparatus and method of controlling comprising a process chamber (3) to accommodate a plurality of substrates (W), a heating furnace (11) surrounding the process chamber (3), an electric heater (12) configured to heat the chamber from the outside (column 4, lines 37-41), an electric blower (18), a temperature sensor (14), a control section to control heater and blower in accordance with temperature sensor (column 5, line 66-column 6, line 25) wherein the control section conducts temperature control in chamber from an initial temperature to a target temperature such that power is fed to the heater to heat the chamber to a predetermined temperature and when chamber reaches predetermined temperature decreasing power to heater to a rate lower than first rate and supplying a cooling gas to forcibly cool the process chamber wherein the control section stops power to the blower when heating chamber and stops power to heater when cooling (column 6, line 26-64), and the chamber is quartz (column 4, line 43). While Kato does not disclose a temperature in the range of 100 to 500 degrees Celsius, Kato does disclose that his invention may be used in a low temperature furnace such as a CVD furnace (column 8, lines 37-38) which inherently would be in the 100-

Art Unit: 3742

500 degrees Celsius temperature range because of the nature of the process being performed and inherently would be below the temperature initially disclosed by Kato (column 4, lines 41-42).

Allowable Subject Matter

3. Claims 2-11, 13-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina Fuqua whose telephone number is (571) 272-4779. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/584,258

Art Unit: 3742

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000/1

stf January 21, 2008 Shawntina Fuqua

Examiner Art Unit 3742